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(54) Title: METHOD AND MATERIALS FOR PRODUCING DELETION DERIVATIVES OF POLYPEPTIDES

(57) Abstract: The present invention describes an *in vitro* transposition-based methodology for generation of deletion derivatives of polypeptides. An artificial transposon containing at least partly within its transposon ends a modification with translation stop codons in three reading frames is provided. In the method, transposition complexes are assembled using the modified transposon and essentially random integrations into the target plasmid, containing a polypeptide coding nucleic acid of interest, are recovered as a plasmid pool. Subsequent manipulation steps including restriction enzyme digestions and ligation result in pools of mutant clones from which deletion derivatives of a polypeptide coding nucleic acid of interest and its respective deletion polypeptides could be produced.